Review of Radical Political Economics

Capital Accumulation and the Rise of the New Middle Class

Val Burris
Review of Radical Political Economics 1980 12: 17
DOI: 10.1177/048661348001200102

The online version of this article can be found at: http://rrp.sagepub.com/content/12/1/17

Published by: \$SAGE

http://www.sagepublications.com

On behalf of:



Union for Radical Political Economics

Additional services and information for Review of Radical Political Economics can be found at:

Email Alerts: http://rrp.sagepub.com/cgi/alerts

Subscriptions: http://rrp.sagepub.com/subscriptions

Reprints: http://www.sagepub.com/journalsReprints.nav

Permissions: http://www.sagepub.com/journalsPermissions.nav

Citations: http://rrp.sagepub.com/content/12/1/17.refs.html

>> Version of Record - Apr 1, 1980

What is This?

Capital Accumulation and the Rise of the New Middle Class

Val Burris*

ABSTRACT: The aim of this paper is to present an historical analysis of the expansion of the new middle class in the United States since the beginning of the 20th century. In opposition to conventional accounts which interpret the growth of professional and managerial occupations primarily as a consequence of technological changes associated with the process of industrialization, I argue that changes in the class structure must be viewed as a structurally determined consequence of the inherent contradictions of capitalist society, of the process of class conflict itself, and the adaptive mechanisms which have emerged in response to these. The expansion of the new middle class is analyzed in relation to the historical development of the capital accumulation process and each of its three principal contradictions: (1) the tendency toward a decline in the rate of profit, (2) the intensification of class antagonism, and (3) problems in the realization of surplus-value. The application of this model to the present period suggests that we are entering into a period of diminishing growth and may even be approaching the upper limits to the size of the new middle class. The paper concludes with a discussion of the possible political consequences of this relative stabilization of class boundaries.

Introduction

The debate concerning the class structure of capitalist society has, over the past fifty years, focused time and again on a single persistent theme: the question of the so-called "new middle class." Central to this discussion has been a profound questioning of the contemporary viability of the Marxian conception of class and of the historical theory and political strategy based upon that conception. According to Marx's original theory, the social relations of capitalist society are structured around a single class polarity. On the one side are those nonproducers whose ownership of the means of production allows their expropriation of the economic surplus of society (the bourgeoisie), and on the other are the direct producers who, lacking the necessary means of production, must sell their labor power in order to subsist (the proletariat). There are thus two major classes, defined reciprocally in terms of one another, and related to one another in a manner which is objectively antagonistic. The dynamics of

capitalist development, according to this viewpoint, are such that they lead to the simplification and intensification of this fundamental antagonism. Other divisions within society are subordinated to this single antagonism as residual social groups and classes, such as the class of independent producers (the petty bourgeoisie), are eventually incorporated into or align themselves behind one or the other of the two dominant classes. Capitalism, as an inherent consequence of its development, thereby creates the social and political preconditions for its eventual transformation in the form of a direct confrontation between the bourgeoisie and proletariat. (Marx and Engels 1972:335-345).

The problems with this account are widely recognized. Instead of becoming progressively simplified, culminating in an explosive confrontation between two opposing classes, the class structure of advanced capitalist society has become more complex. Divisions within the proletariat have persisted, while residual and intermediate classes have failed to disappear. Most important, a whole new occupational stratum of salaried managers and professionals has emerged, attaining a position of social and political importance intermediate between the extremes of bourgeoisie and

^{*}I am grateful to Beverly Burris, Paul Goldman, David Stark, Al Szymanski, Erik Wright and the referees for the RRPE for their helpful comments and criticisms on earlier drafts of this paper. Any remaining errors are my responsibility.

proletariat. It is this stratum which is commonly referred to as the "new middle class." Like the proletariat, members of this class lack ownership in the means of production; nevertheless, they participate, in varying degrees, in the control and management of capital within the immediate process of production. Similarly, they share with the proletariat the status of alienating their labor-power in return for a wage; yet they retain a degree of autonomy over the immediate application of their own labor-power, and/or participate in the supervision of the labor of others. Such positions thus combine attributes of both the proletariat and the bourgeoisie, and thereby occupy an intermediate position within the class structure of capitalist society.

Unlike earlier intermediate groupings, such as the traditional petty bourgeoisie, this new middle class does not exist on the receding periphery of capitalist production, but emerges within the very center of capitalist economic relations. Hence, it cannot plausibly be dismissed as a declining remnant of some prior mode of economic organization, destined to disappear with the fuller development of capitalism, but poses a direct challenge to the viability of the two-class model. Neither can this challenge be dismissed by the disclaimer that Marx's conception of class was not intended as a "descriptive" model, but only for the specific purpose of analyzing the forces underlying social change, for it is precisely this aspect of the Marxian theory which is being called into question. The purported significance of the new middle class is that by intervening between the two major classes and preventing the polarization of society, it thereby alters the historical dialectic of class conflict implicit in the twoclass model.

Efforts to preserve or restore the utility of the class polarization model have taken several forms. First has been the attempt to incorporate the new occupational strata within the traditional class categories of proletariat and bourgeoisie, appropriately modified to take into account certain changes in capitalism since Marx's time (Freedman 1975; Becker 1973). Theories of the "new working class" are one variant of this approach (Gorz 1967; Mallet 1975). Second has been the elaboration of distinctions between "objective" and "subjective" dimensions of social class as a means of bridging the gap between the theory of class polarization and the apparent moderation of class conflict (Ollman 1972; Aronowitz 1973). While theoretically innovative, these efforts have tended to reduce the inadequacies of Marx's class analysis to the need for a simple updating of his categories, or else to his supposed failure to give adequate weight to the "subjective" aspects of class formation — thereby avoiding the basic issue of whether and to what extent the actual structure of class relations has been -altered in the

transition to advanced capitalism. For this reason, such efforts have been ultimately incapable of resolving the difficulties which presently confront the Marxian theory of class.

The recent revival of interest among Marxian theorists in the question of the new middle class reflects the growing dissatisfaction with the simple polarization model of class relations, and the recognition of the need for a more fundamental rethinking of the whole concept of "class." The writings of Poulantzas (1974), Wright (1976), Carchedi (1975) and the Ehrenreichs (1977), in particular, have placed the question of the new middle class at the very center of an attempt to develop alternative models of class structure more appropriate to the social conditions of advanced capitalism, but without abandoning Marx's fundamental insights concerning the antagonistic nature of capitalist social relations.

The present essay contributes to this renewed discussion of the new middle class by situating the historical development of the new middle class in relation to the structural dynamics of the capital accumulation process. It is my contention that only by examining the historical origins of the new middle class, as well as the concrete social forces which have contributed to its expansion in recent decades, that we can begin to develop an adequate theoretical understanding of its place and significance within the class structure of advanced capitalism. This analysis, although it challenges the viability of Marx's two-class model, is nonetheless patterned after what I understand to be the essentials of Marx's historical method. This includes an emphasis upon the social relations of production as the determining characteristic of each historical epoch, and the attempt to account for historical change in terms of the structural contradictions which emerge within these relations of production. In this manner, I hope to demonstrate the contemporary applicability of the Marxian paradigm to the analysis of social change— - including, in this case, even those changes which go beyond the original framework of Marx's two-class model.

The Class Position of the New Middle Class

The complex issues raised by the recent debate over the appropriate criteria for defining social classes are beyond the scope of this essay. For purposes of comparison, however, the conception of the new middle class adopted here can be summarized briefly as follows. I shall use the term "class" in this essay to designate distinctive structural positions within the social relations of production. Two features of this definition require special emphasis. First, class in this sense is a relational concept: classes are defined in terms of their relation to other classes within the pro-

cess of class struggle. Second, the social relations which serve as the primary basis for the analysis of class are those of the sphere of production. This does not mean that social relations outside the sphere of production are irrelevant to the analysis of class. As they present themselves concretely, class formations are always a complex ensemble of political, ideological and exchange relations, as well as social relations at the level of production. The basic premise of the Marxist conception, however, is that within this complex ensemble it is the social relations of production which play the ultimately determining role, and which therefore provide the appropriate starting point for class analysis.

As the term ''new middle class'' suggests, there are two dimensions along which the unique position of this class may be located: it is distinguished from both proletariat and bourgeoisie as occupying a separate or 'middle' position within the class structure; and it is identified as being "new" or different from previously existing intermediate classes, in particular from the petty bourgeoisie or "old middle class." The justification for distinguishing between a "new middle class" and an "old middle class" is expressed by Braverman in the following fashion:

The old middle class occupied that [intermediate] position by virtue of its place outside the polar class structure; it possessed the attributes of neither capitalist nor worker; it played no direct role in the capital accumulation process, whether on one side or the other. This "new middle class," by contrast, occupies its intermediate position not because it is outside the process of increasing capital, but because, as part of this process, it takes its characteristics from both sides. (Braverman 1974:407)

The precise nature of this intermediate position may be specified in terms of the two most basic productive relations of capitalist society. These are relations of economic ownership, i.e., the power to assign the means of production to given uses and to dispose of the product obtained; and possession, i.e., control over the means of production in the immediate process of production. Included under the category of "means of production" are both the material means of production (land, raw materials, machinery, etc.) and the human forces of production (labor power). The bourgeoisie, as the dominant class of the capitalist mode of production, has both economic ownership and possession of the material means of production, and both employs and controls the labor power of others. The proletariat, as the subordinate class of the capitalist mode of production, has neither economic ownership nor possession of the means of production, and must alienate its rights to the product of its labor in exchange for

a wage and submit its labor activity to external control. The new middle class, as an intermediate class, combines characteristics of both of these polar classes. More precisely, the new middle class can be defined as those positions within the social division of labor which share a common position with the proletariat in terms of two basic ownership relations: (1) nonownership of the material means of production, and (2) the alienation of one's labor power in exchange for a wage; but which are distinguished, in varying degrees, by some combination of the following relations of possession: (1) control over the immediate employment of the material means of production, and (2) control over the exercise of one's own labor and/or the labor of others.

This definition, it should be noted, designates a class which is both heterogeneous and indeterminately bounded. Whether or not, under these circumstances, it is still appropriate to speak of these positions as constituting a distinctive social class depends upon two things: (1) the importance which is given to the political, cultural and ideological dimensions of class structuration, and (2) the extent to which these intermediate positions are viewed as sharing fundamental class interests which transcend their distinctive economic characteristics. On both of these grounds I would argue that such positions should indeed be interpreted as occupying a common class location. In the concrete form in which these intermediate positions appear, they are characterized by similarities of income, lifestyle and patterns of consumption, a uniformity of cultural and educational background, a degree of horizontal mobility and intermarriage, and political and ideological affinities which are sufficient to warrant their classification as a single social entity. Furthermore, from the standpoint of class struggle - a struggle which is structured in terms of the basic opposition of interests between the proletariat and the bourgeoisie - such positions not only occupy an intermediate location between the proletariat and the bourgeoisie, but acquire, in the historical process of class conflict, a fundamental unity of interests which is forged in terms of their shared antagonism to both of these other classes. If classes are ultimately defined by their relation to other classes in the process of class struggle, then such intermediate positions should be interpreted as constituting a distinctive social class and not, as some have suggested, as positions "between" classes.

Technology and the Rise of the New Middle Class

The most commonly advanced explanation of the emergence of the new middle class is one which interprets the expansion of managerial and professional employment as primarily a consequence of technological changes associated with the process of industrialization. Such explanations represent what may be termed a *technogenic* conception of socio-historical change. Mills' classic study of the new middle class in *White Collar*, for example, provides an early statement of the technogenic thesis.

The proliferation of new professional skills has been a result of the technological revolution and the involvement of science in wider areas of economic life; it has been a result of the demand for specialists to handle the complicated institutional machinery developed to cope with the complication of the technical environment (Mills 1951:113).

Subsequent discussions of the new middle class have given similar priority to technological change as the historical force underlying the expansion of professional and managerial employment.²

Three mechanisms in particular are cited to account for the link which the technogenic theory posits between industrial development and the emergence of the new middle class. In the first place, increasingly sophisticated productive technologies are assumed to require qualitatively higher levels of skill on the part of the direct producers, thereby raising the market value of their labor and fundamentally altering the conditions and content of their work activity (Kerr et al. 1960). At the same time, the greater the requirements of technical and administrative expertise in the management of the productive process, the more impossible it becomes for those who own the means of production to master the requisite skills or provide the degree of guidance necessary to assure the efficient utilization of those means of production. Consequently, there emerges a growing stratum of managers and professionals who gradually usurp and diffuse the prerogatives of ownership on the basis of their specialized knowledge and expertise (Galbraith 1967). Finally, advanced technologies, by increasing productivity in the agricultural and industrial sectors of the economy, reduce the manpower requirements in those areas, resulting in a progressive shift within the division of labor toward the "tertiary" or service sector (Fuchs 1968). This too, it is argued, has the effect of altering the technical characteristics of work roles and work activities, with consequences for the class composition of society.

Explanations of this type appear widely in the sociological literature on the new middle class. Yet, as I shall argue below, despite their widespread acceptance and superficial plausibility, such technogenic interpretations are both theoretically deficient and empirically unsubstantiated. At the root of the inadequacies of the technogenic perspective are two fundamental errors. The first is the tendency to fetishize technology

as an extra-social, quasi-natural evolutionary force. Second is the failure to properly distinguish between occupation and class, i.e. between the technical division of labor and the social division of labor.

The implicit claim of the technogenic viewpoint is that the development of technology follows imperatives that are essentially independent of the historically specific social relations in which it occurs. Such a reification of technology disregards the extent to which productive techniques are themselves conditioned by the patterns of conflict, relations of authority and forms of economic organization characteristic of the society in which they are developed and implemented. The technogenic viewpoint stresses, in a one-sided fashion, the impact which technologies have upon social and political relations, but without recognizing that technologies have such an impact precisely because they are from the beginning a material expression and crystalization of social and political forces.

Historical research directly challenges many of the simplistic assumptions upon which the technogenic theory is founded — in particular, the notion that technological change is adequately explained by the general drive for greater productivity and efficiency, and the notion that occupational structures are simply a reflection of the mode of technology employed in production. Marglin (1974), for example, has demonstrated that many of the technological and organizational innovations associated with the emergence of the factory system in the early 19th century cannot be accounted for in terms of improved efficiency, but only as a consequence of the successful struggle of capitalist employers to impose stricter forms of work discipline upon their employees. In a detailed study of the American steel industry, Stone (1974) concludes that changes in the occupational structure of that industry arose not out of technological necessity, but represent the outcome of protracted conflict between workers and employers over control of the labor process. The point is convincingly documented in Braverman's (1974) comprehensive study of the labor process in the period of monopoly capitalism. Technological innovation, Braverman demonstrates, is a social as well as a technical process — rooted within and influenced by the specific economic and political relations of the society in which it occurs and, in particular, by the historically specific forms of class conflict taking place at the point of production.

The technogenic theory's assumption of an automatic association between the adoption of advanced technology and the need for a more highly skilled workforce is similarly contradicted by available empirical evidence. This assumption can be shown to derive from the progressive inflation of educational prerequisites for employment rather than from changes in the actual content and requirements of contemporary occupational roles (Berg 1971). As empirical studies

have shown, the actual historical trend is virtually the opposite of that assumed by the technogenic theory; the successive stages of mechanization which have taken place during the 20th century have been associated with a general dequalification of the industrial workforce (Bright 1966). The emergence of a highly qualified stratum of managers and professionals must therefore be recognized as a development which contravenes the general impact of technological innovation — or, more precisely, which reveals its mixed and contradictory consequences.

The error of the technogenic viewpoint derives once again from its tendency to fetishize technology as an independent force which impinges upon society from without, thereby ignoring the reciprocal impact of social factors upon the development of technology itself. In this case, the technogenic theory rightly emphasizes the importance of specialized technical knowledge for the nature of class relations, yet fails to realize that, precisely because of this fact, the distribution of technical knowledge is itself one of the explicit objects of class struggle. The choice of production technologies consequently reflects the relative capacity of opposing occupational groups to defend or extend their command over specialized domains of technical expertise. From this standpoint, the progressive dequalification of the labor force in the course of capitalist development can be interpreted as the tendential outcome of the struggle between workers and employers — mediated by the process of technological innovation — for control over the labor process and the capacity to enforce claims upon the distribution of the social product. The fact that there have emerged certain occupational groups which have not been subject to this deskilling trend, and have even increased the level of technical expertise at their command, cannot be attributed to any inherent logic of technological development, but must also be explained as the structurally determined outcome of the struggle among classes for social and economic advantage.

These deficiencies of the technogenic viewpoint stem, in large part, from the failure to properly distinguish between occupations as positions within the technical division of labor and classes as positions within the social division of labor. This error is most evident in those theories which identify the new middle class with the growth of the service sector. This approach equates the structure of class relations with the distribution of technical specializations, without recognizing the distinctiveness of these two dimensions or attempting to specify the complex relations between them. The notion that a new middle class has been created through expansion of service employment ignores the fact that the largest and fastest growing of such occupations are those near the very bottom of the social hierarchy: janitors, waiters, hospital orderlies, etc. While the technical function of these occupations may be different from that of the traditional blue-collar proletariat, their position within the social relations of production is, in many cases, virtually identical. Service occupations thus constitute a homogeneous social class no more than do goods-producing occupations.

These comments point to the necessity of conceptualizing the emergence of the new middle class as a truly social process, and not simply as a consequence of technological development. Technology cannot be isolated as an independent and original causal factor, but must itself be situated within the broader context of social forces from which it derives. The emergence of a new middle class cannot be understood as something which is induced from without, but must be analyzed as a process which emerges from within a given structure of social relations as an expression of the immanent developmental tendencies which characterize that structure.

Toward a Marxian Theory of the New Middle Class

Let me now summarize the basic argument which I intend to develop in the remainder of this essay. The expansion of the new middle class — rather than being attributed to autonomous changes in technology — will be analyzed as an expression of the inherent logic of capitalist economic development, conceived as a self-expanding, yet contradictory, system of social relations. In particular, I shall argue that changes in the class structure of capitalist society may be interpreted as a structurally determined consequence of the inherent contradictions of the capital accumulation process, of the process of class conflict itself, and the adaptive mechanisms which have emerged in response to these.

According to the Marxian view, the driving force behind economic development and transformation in a capitalist society is the process of capital accumulation. The cycle of accumulation defines capitalist production as an inherently expansionary system — one which generates a continual expansion of the means of production in the form of private capital and the simultaneous incorporation of increasing numbers of producers in the form of wage laborers. The accumulation of capital, however, is not a smoothly functioning process, but one which is beset by inherent structural impediments or *contradictions*.

1. The progressive mechanization of production which accompanies the accumulation process has the consequence of raising the proportion of constant capital employed in production (the organic composition of capital). Since new surplus-value can only be the product of living labor, and since living labor declines by comparison with the accumulated "dead" labor represented by fixed capital, the potential rate of surplus extraction declines as a percentage of total capital

investment. There is thus a long-term tendency for the rate of profit to decline. This engenders an intensified struggle over the rate of surplus expropriation and periodic economic crisis.

2. The accumulation of capital and the widening of capitalist control over production simultaneously involves the expansion of an oppositional class of wage laborers — the proletariat — pitted against capital in a struggle over the rate of exploitation. Being brought together in large enterprises, having similar economic interests and opportunities for communication, these laborers eventually acquire the organized capacity to impose barriers on the process of surplus expropriation and to challenge the system of private appropriation politically. To the extent that they are successful in limiting the discretionary control of capitalists over the production process and appropriating to themselves a larger share of the total economic product, the proletariat exacerbates the tendency for the rate of profit to fall and contributes to the trend toward periodic economic crisis.

3. Further impediments to the accumulation process arise from the fact that there is no automatic mechanism to guarantee the growth of aggregate demand sufficient for the realization of surplus-value. Indeed, there is an intrinsic contradiction in capitalist society between the conditions necessary for the adequate production of surplus value (minimization of the wage bill) and for the realization of surplus-value (expansion of consumer demand). The consequence is a tendency toward underconsumption and associated forms of economic crisis.

The capitalist mode of production is thus a system of social relations which is founded on the principle of capital accumulation, and yet, at the same time, continually erects internal barriers to the operation of the accumulation process.3 To a certain degree, the impediments to capital accumulation are periodically suspended as a normal consequence of the cyclical process of economic crisis and recovery. Such crises temporarily restore conditions for profitable capital accumulation by eliminating less productive capital units from the market, devaluing the existing stock of fixed capital (thereby reducing the organic composition of capital), increasing the ranks of the reserve army of the unemployed so as to effect a downward pressure on wages, and creating a back-log of consumer demand, technological innovations and investment opportunities. Ultimately, however, barriers to the accumulation process are only overcome through the structural transformation of capitalist production itself through a continual process of institutional adaptation. In the 20th century this has included changes in the scale and organizational form of capital, the rationalization of the labor process, the revolutionizing of the forces of production, the creation of institutional mechanisms for maintaining aggregate demand,

and the increasing intervention of the state as a means of supporting and stabilizing the accumulation process. Collectively, these changes define the transition from the competitive capitalism of Marx's era to the modern system of state-directed monopoly capitalism. It is this transformation of capitalist relations of production, I shall argue, to which the rise and expansion of the new middle class must be attributed.

In the sections which follow, the historical emergence of the new middle class will be analyzed in terms of the general theory of capital accumulation outlined above. The structural dynamics underlying the growth of this class will be discussed under four general headings. First I shall examine those changes in the class structure which are rooted in the process of capital accumulation in general. Then I shall examine, in turn, the further transformations which have occurred through the unfolding of each of the three main contradictions of the capital accumulation process. This will provide the theoretical framework for then analyzing, in greater detail, the growth of the new middle class during the most recent historical period and the present position of this class within the structure of capitalist social relations.

Capital Accumulation and the Transformation of the Class Structure

That the process of capital accumulation is, at the same time, a process of class formation and transformation can be seen most clearly in terms of its impact upon the class of independent commodity producers. In the course of capital accumulation there is a progressive erosion of the economic position of independent producers and, over time, the incorporation of these domains of economic activity within capitalist relations of production. Under the impact of capitalist competition the class of independent professionals, artisans, shopkeepers and farmers continually declines while the number of producers employed by capital increases correspondingly. This trend is illustrated in Table 1.

What happens to these independent producers who are eliminated from the market and to the forms of economic activity in which they were once engaged? Marx speaks of them as necessarily being cast into either of the two dominant classes, the majority being reduced to the status of proletarians (Marx and Engels 1972:341-342), but this formulation is much too simple. Proletarianization is seldom instantaneous, nor is it an all-or-nothing phenomenon; rather it is a process, accompanied by resistance and struggle, which takes place over an extended period of time. Institution of the legal relation of wage labor is merely the initial step toward the subordination of labor to capital — a pro-

TABLE 1:

PERCENTA GE OF SELF-EMPLOYED WORKERS IN THE U.S. LABOR FORCE: 1900 TO 1978

	1900	1910	1920	1930	<i>1940</i>	1950	1960	<i>197</i> 0	<i>1978</i>
Total self-employed	33.7	29.2	26.4	23.2	21.6	16.9	12.2	9.3	8.4
Agricultural	21.0	17.2	15.6	12.3	11.3	7.6	3.9	1.8	1.7
Nonagricultural	12.7	12.0	10.8	10.9	10.2	9.3	8.3	7.5	6.7

SOURCES: Data for 1940-1978 from U.S. Department of Commerce, Bureau of the Census, 16th Census (1940), vol. IV, pp. 119-121; 17th Census (1950), vol. PE-1B, pp. 123-128; 18th Census (1960), vol. PC(2)-7A, pp. 277-283; 19th Census (1970), vol. PC(2)-7A, pp. 693-714, and U.S. Department of Labor, Employment and Training Report of the President (1978), p. 264. Data for 1900-1930 adapted from Spurgeon Bell, Productivity, Wages and National Income (Washington, D.C.: 1940), p. 10.

cess which is only completed with the effective reorganization of the actual labor process under capitalist control. At the level of the labor process itself, forms of economic activity newly incorporated into capitalist relations of production are seldom fully and immediately proletarianized, but for a time bear the mark of their prior independent status. The demise of independent producers external to capitalist relations of production is thus paralleled by the emergence within capitalist relations of production of partly or incompletely proletarianized positions.

Although the long-term tendency is for these positions to be progressively reduced to an unambiguous proletarian status, this process takes time to accomplish and necessarily encounters resistance on the part of those who occupy such positions. Moreover, there are reasons to believe that during the later stages of capitalist expansion this transition period may be an extended one. Those characteristics of the labor process which enable certain producers to more successfully defend their independent status against the expansion of capital (the need for decentralized production, high levels of technical skill, etc.) are precisely the characteristics most likely to hinder the reduction of these economic activities to forms which can be accomplished by fully proletarianized labor. Since any mode of production tends at first to adopt the technical organization of labor bequeathed to it by the mode of production which it supplants, there is the basis here for the incorporation, within capitalist relations, of forms of productive activity incompatible with complete or rapid proletarianization. The same applies in certain instances to the expansion of capitalist relations into wholly new areas of production not yet staked out by independent producers. In both of these cases, the process of capital accumulation tends to create, dissolve and continually re-create at the frontier of capitalist expansion a zone in which significant numbers of those employed by capital will share a degree of autonomy and control over the labor process characteristic of the traditional petty bourgeoisie.

This provides one basis for the emergence within capitalist relations of production of positions belonging to the new middle class.

A further source derives from the fact that the accumulation of capital is simultaneously a concentration and a centralization of capital. Many of the same forces which have led to the decline of the petty bourgeoisie have resulted also in the elimination or expropriation of weaker units of capital by those which are larger or competitively stronger. With the increase in the average scale of capitalist enterprise, functions which were once vested in the person of the individual entrepreneur have been progressively transferred to a differentiated institutional apparatus (Poulantzas 1975; Carchedi 1975; DeVroev 1975). This differentiation of the functions of capital introduces a new dimension into the labor process and brings into existence a distinctive array of occupational positions: professional managers, supervisors, accountants, personnel directors, etc. The growth of these occupations is only partly attributable to the requirements of coordination inherent in the technical division of labor, but reflects as well the development and differentiation of the increasingly elaborate mechanisms of control which are necessary for the appropriation and realization of surplus-value on an enlarged scale. Such positions participate in the functions of capital thereby sharing a measure of its authority and privilege — but are nonetheless subordinate to capital as part of a fragmented and increasingly routinized labor process. This intermediate status defines these positions as also part of the new middle class.

Class Structure and Technological Development

While certain changes in the class structure of capitalist society can be traced to the simple quantitative expansion of capital, most can be explained only by analyzing the specific contradictions which impede

the accumulation process and the qualitative transformations of social production which arise out of these. The first such contradiction is that which Marx describes as the tendency toward a decline in the general rate of profit as the result of changes in the organic composition of capital. At the heart of the accumulation process is the competitive struggle among capitalists, and between capitalists and workers, over the appropriation of surplus-value. It is under these circumstances that capitalists are motivated to substitute machinery for human labor in the effort to reduce costs, increase productivity and thus maintain their competitive position. The wider application of machine technologies, however, has contradictory implications for the process of capital accumulation. By reducing the amount of time necessary for workers to reproduce their own means of subsistence and by replenishing the reserve army of labor, the mechanization of production increases the potential rate of surplus appropriation and hence the overall rate of profit. On the other hand, by increasing the ratio of constant to variable capital (the organic composition of capital), mechanization reduces the proportion of capital invested in human labor, the source and measure of surplus value, and thus precipitates a counteracting tendency for the rate of profit to fall. From the point of view of each individual capitalist there is still a pressing incentive to mechanize, since firms with a more advanced level of mechanization are able to produce commodities with less than the average or socially necessary quantity of labor, thereby establishing a competitive advantage over those operating at a lower level of mechanization. In the long run, however, this source of excess profits disappears as a given level of mechanization becomes generalized throughout the industry, at which point the tendency toward a decline in the rate of profit reasserts itself. The development of technology under capitalism, insofar as it is associated with a disproportionate accumulation of constant versus variable capital, is therefore an inherently contradictory process: at once a necessary medium of capital accumulation and, at the same time, a potential barrier to further accumulation.

While there is considerable controversy regarding the specific conditions under which increased mechanization will be associated with a net decline in the rate of profit and thus a crisis of capital accumulation, most commentators agree that a secular increase in the organic composition of capital played an important role in the periodic crises of competitive capitalism (Wright 1975:18). The occurence of such crises contributed to a highly uneven process of technological development, and thus inhibited the routinization of technological innovation. By accelerating the concentration and centralization of capital, however, such crises also advanced the growth of monopoly capital, which in turn significantly altered the relation be-

tween capital accumulation and technological change. With the transition from competitive to monopoly capitalism, the temporary advantages of mechanization are transformed into a relatively permanent source of surplus profits through the creation of institutional and structural barriers to the diffusion of technological innovation (Mandel 1975:248-273). High levels of minimum investment, control over patents, cartel agreements and other barriers to entry enable monopolistic corporations to partially escape the trend toward declining profits through an effective monopolization of technological progress. As other sources of profit are exhausted, this intensified pursuit of "technological rents" contributes to an accelerated pace of technological renewal, as well as qualitative changes in the social relations of technological innovation.

Unlike earlier stages of capitalist industry in which the development of the machine technologies took place in a largely unplanned fashion, under monopoly capitalism technological innovation has become a planned and systematic process in which science is increasingly integrated and adapted to the needs of capital accumulation (Noble 1977). One expression of this new relationship between science and industry is the tremendous expansion of organized research and development. Monopolistic industries provide the increased concentrations of capital needed to support an organized research apparatus, while monopolistic surplus profits provide the incentive for continual technological renewal. The systematic application of science to the needs of capitalist industry is further encouraged by the state which underwrites increased investment in scientific and technological research as part of its role in supporting the capital accumulation process. It is under these specific circumstances that the pressure for accelerated technological innovation creates the basis for the emergence and differentiation of a distinctive sector of the division of labor engaged in the development and implementation of new technologies. This trend is reflected in the expansion of new-middle-class positions in the scientific and technical fields.

This expansion of scientific and technical employment provides the superficial empirical basis for the elaboration of technogenic theories of class transformation such as those discussed earlier. By linking this development to the historically specific dynamics of the capital accumulation process, however, a number of points are highlighted which remain obscure within the technogenic account. First, whereas the technogenic account of the new middle class posits a general upgrading of technical skills and social position in the course of technological development, the above analysis distinguishes between positions directly engaged in the production of surplus-value and those which contribute indirectly to the expansion of surplus appropriation through their specialized role in

the development and transformation of the technical forces of production. While positions of the latter type tend to be relatively resistant to proletarianization due to the highly skilled and innovative nature of their labor, there is nothing in the process of mechanization per se which necessarily transforms the class standing of those who routinely employ (or are employed by) the more technologically advanced means of production. Indeed, to the degree that surplus appropriation depends simultaneously on the reduction of wage costs and the maintenance of effective mechanisms of labor control, as well as the improvement of technical efficiency, there is considerable pressure for technological innovation to be directed in channels which do not significantly enhance the autonomy, technical competence or social position of the majority of workers. When new technologies do require exceptional levels of skill, autonomy or decision-making responsibility for their routine operation, the logic of proletarianization progressively tends to reduce these to more standardized functions.6 The impact of technological development upon the class structure thus tends to be restricted to the creation of a small corps of scientific and technical specialists who stand outside of the immediate production process, without significantly affecting the class position of most direct producers.

Second, to the extent that technological development is rooted in the process of capital accumulation, it is therefore subject to the underlying contradictions which characterize that process. Although the effects of such contradictions are partially neutralized by the institutional and structural adaptations of monopoly capitalism, they are far from overcome. The systematic application of science to the production process, as the most advanced form of the socialization of labor, remains potentially incompatible with the reproduction of economic relations based upon private appropriation (Marx 1973:700-708). The expansion and transformation of the technical means of production is therefore an uneven process, and ultimately constrained by the contradictory requirements of capital accumulation. To the extent that the size of the new middle class is tied to the pace of technological innovation, its growth will follow similar patterns and confront similar limits. This conclusion is directly contrary to the assumptions of the technogenic viewpoint which interprets the growth of technology as a more or less linear process and projects the expansion of the new middle class continuously into the future.

Class Conflict and the New Middle Class

A second contradiction of the capital accumulation process is that inherent in the antagonistic relationship between capital and labor. The accumulation of capital necessarily involves the expansion of the working class as the ultimate source of surplusvalue. The growth and consolidation of the working class, however, has contradictory consequences for the accumulation process as a whole. By increasing the potential for unified working-class resistance, the concentration of workers in large-scale industry creates the possibility of organized opposition to the interests and prerogatives of capital. Intensified struggle over the appropriation of surplus-value threatens the accumulation of capital both in the limited sense of a squeeze on the rate of profit and in the broader sense of political opposition to the system of private appropriation. The dynamics of this struggle play a central role in the transformation of capitalist social and economic relations.

In many contemporary accounts the rise of the new middle class is taken as an indication of the dissolution of class antagonisms, and thus as grounds for the rejection of the notion of class conflict as the motive force of social change. In contrast, I shall argue that the growth of the new middle class, rather than signaling a decline in the importance of class conflict, can itself be interpreted as a mediate consequence of the conflict between opposing classes and, in particular, as an expression of developmental tendencies which are rooted in the capital-labor antagonism. Two related processes of class transformation can be analyzed in this fashion. First is the restructuring of the social division of labor which grows out of the progressive dequalification of the capitalist workforce. Second is the development of complex administrative hierarchies within the capitalist firm.

As already noted, one of the primary expressions of the capital-labor antagonism has been the struggle between capitalists and workers over control of the immediate process of production - a struggle which has resulted in the progressive expropriation of the skills of direct producers through the efforts of capitalists to reduce the collective power of their workers and to subordinate them to stricter mechanisms of supervision and control (Braverman 1974). From the standpoint of the accumulation of capital, this dequalification of labor increases the potential rate of exploitation by reducing the market value of laborpower and increasing the capacity for regimentation of the pace and intensity of work. More generally, by fragmenting the labor process and mystifying the technical aspects of production, it serves to increase the dependence of workers upon capital and to discredit any notion of workers' self-management thereby inhibiting the development of class-conscious socialist politics among the working class.

In large part, the skills lost by workers reappear as attributes of a more sophisticated mechanical apparatus which, while executing the most complex tasks, requires only the simplest human supervision. To a certain extent, however, they are also transformed into newly specialized domains of technical expertise. The

obverse of the "degradation of labor" is thus the emergence of a privileged stratum of highly qualified technical and supervisory personnel in which the skills and knowledge once held collectively by the working class are concentrated and employed in a manner which furthers the accumulation of capital and perpetuates the subordination of the immediate producers. Class struggle over control of the labor process thus generates not simply a dequalification of labor, but rather a polarization in the levels of skill and autonomy of those employed by capital, and in this manner contributes to the historical expansion of the new middle class.

A related consequence of the struggle between capital and labor has been the development of complex job hierarchies within the capitalist firm. In part, this proliferation of levels of authority and status may be viewed as a necessary consequence of the concentration and centralization of capital and the corresponding increase in the scale of capitalist enterprise. As the studies of Marglin (1974), Stone (1974) and Wachtel (1974) demonstrate, however, it has equally been the result of a relatively conscious effort on the part of capitalists to reconstruct the social relations of production so as to impede the development of a unified working-class opposition. The introduction of wage incentive schemes, promotional hierarchies, internal labor markets, the increased importance attached to educational qualifications, as well as broader changes in the organizational structure of the firm have served to enhance the control of capitalists over the labor process by setting individual workers in constant competition with one another. This hierarchical trend has contributed not only to the internal stratification of the working class, but also to the expansion of positions sufficiently removed from direct production and so predominantly engaged in the maintenance of capitalist control that they must be included as part of the new middle class.

In both of these instances the class antagonism between capital and labor has created the impetus for the expansion of the new middle class. The resultant transformation of capitalist relations of production has served to counteract the trend towards an increase in the collective power of workers vis-à-vis capital and can thus be viewed, from the standpoint of capital, as an adaptive response to one of the inherent contradictions of the capital accumulation process. Originating at the point of production, this same dynamic is manifested outside the workplace as well. The defense of capital against the threat or actuality of working-class militancy contributes also to the proliferation of such professions as teaching, social work, journalism, advertising, and the like - all of which function to reproduce capitalist social relations through the dissemination of bourgeois ideology, the depoliticization of class antagonisms, and the subordination and fragmentation of working-class culture (Ehrenreich and Ehrenreich 1977). The expansion of new-middle-class positions in these areas should also be viewed as a mediate consequence of the class struggle between capital and labor.

Unproductive Labor and the New Middle Class

A third contradiction of the capital accumulation process is the existence of inherent barriers to the realization of surplus-value. There is a general tendency under capitalism - a tendency which is intensified with the growth of monopoly capital — for the absolute level of surplus-value to increase more rapidly than the means of realizing this surplus-value (Baran and Sweezy 1966). Thus, unless there is a continual expansion of exogenous mechanisms of surplus absorption, the economic system will confront chronic difficulties in the realization of surplus-value, and therefore tendencies toward underconsumption and stagnation.

Certain changes in the class structure have grown directly out of the efforts of capitalist firms to overcome such problems of realization. The expansion and differentiation of the functions of capital in the sphere of realization, for example, has contributed to the growth of new-middle-class positions in such areas as advertising, market research, sales, finance, etc. A more indirect, but ultimately more important, way in which these tendencies toward underconsumption have been mitigated has been through the expansion of the ranks of unproductive labor, i.e., labor which does not produce commodified forms of value for the market. The expansion of such unproductive positions alleviates the tendency toward underconsumption by increasing the aggregate level of consumer demand without a parallel increase in the production of commodities. This tendency is described by Nicolaus (1970) as the "law of the surplus class," which he identifies as the primary basis of new-middle-class expansion, and is also central to Poulantzas' (1975) theory of the "new petty bourgeoisie."

These earlier accounts identify an important element in the overall transformation of the class structure, but have tended to oversimplify the role of unproductive labor in the growth of the new middle class by simply equating the one with the other. Nicolaus, for example, is mistaken to view the expansion of the new middle class as a necessary consequence of the increasing mass of surplus-value and the growth of the relative surplus population, since both of these surpluses can be and are absorbed in other ways (Przeworski 1977). The growth of an economic surplus does not guarantee an expansion of unproductive labor, nor does it uniquely determine the form which such an expansion must take. A further error arises from the tendency to equate the distinction between productive and unproductive labor with a distinction

between productive and unproductive positions within the social division of labor, or the expansion of unproductive labor with the expansion of such unproductive positions. The expansion of unproductive labor is reflected in a shift not only between, but also within individual positions in the social division of labor. Indeed, one of the chief consequences of the increasing socialization of production, with its simultaneous collectivization and differentiation of functions, is that neither productive nor unproductive functions can any longer be unambiguously identified with individual social positions.8 It is thus imperative not to reduce the question of the new middle class to the single issue of productive versus unproductive labor.

These reservations aside, it is nonetheless true that the expansion of unproductive labor has been a major structural adaptation to the contradictions of capital accumulation in the sphere of realization, and that this constitutes an historical dynamic of crucial importance to the process of class transformation. Although the expansion of unproductive labor and the growth of the new middle class are not equivalent, the expansion of the new middle class is inconceivable apart from the general increase in the proportion of unproductive labor. The parallel increase in the available mass of surplus-value and the growth of the relative surplus population can thus be viewed as structural preconditions of the expansion of the new middle class, even though they do not fully explain its extent or direction. Accounting for the actual course of class development requires attention to the manner in which these trends have interacted with the other structural determinants of new-middle-class expansion, as well as analysis of the concrete historical mechanisms by which these structural determinants have been realized.

The Process of Class Transformation

In the previous sections I have argued that the growth of the new middle class must be linked to the dynamics of the capital accumulation process and understood as a consequence of changes in the social relations of production which have occurred through the unfolding of capitalism's inherent contradictions. In accounting for the growth of the new middle class, however, it is inadequate merely to identify certain structural requirements which the new middle class satisfies with respect to the accumulation of capital without accounting for the actual processes and forms of human agency by which these structural requirements are translated into real historical developments. To leave the analysis at the former level results in a kind of "Marxian functionalism" which treats the accumulation process as an automatically self-correcting system, thereby obscuring the actual conflict and indeterminacy which characterize the development of capitalist social relations. While the structural contradictions of capital accumulation define the objective conditions and boundaries within which - short of a radical transformation of production relations — the process of institutional change takes place, there is nothing in the logic of capitalist development which guarantees that these contradictions will be met with effective institutional adaptations, much less that they will be stabilized in a particular predetermined fashion. An adequate account of the rise of the new middle class must therefore be able to identify the concrete social mechanisms by which changes in the class structure have been effected. Although such a concrete historical analysis cannot be developed in any detail within the framework of this paper, the general outlines of such an analysis can be sketched in brief.

The first and most direct mechanism of new middle class expansion is the change in the social division of labor which has resulted from the separate actions of individual capitalists or capitalist firms in their competitive pursuit of surplus-value. This process accounts for much of the change in the job structures within firms which directly produce and appropriate surplus-value - including the differentiation of the functions of capital, the intensification of technological innovation, the concentration of production skills in managerial hierarchies, and the shifting emphasis to tasks of realization. It would be mistaken, however, to exaggerate the extent to which the growth of the new middle class is merely the product of individual capitalists' decisions in rationally attempting to overcome the barriers to accumulation. Even when such decisions are within the discretionary limits of individual firms, they are seldom made freely or with full rationality, but under the influence of ingrained traditions of economic organization and within the context of ongoing struggle and opposition. Changes in the social division of labor are always a product of competing forces and depend, among other things, upon the effective capacity of the working class to resist innovations which intensify its exploitation or deepen its subordination. Any detailed reconstruction of the growth of the American new middle class would thus have to take into account the actions of workers as well as employers, insofar as these have been reflected in the degree of latitude exercised by capitalists over the restructuring of the labor process.

Equally important is the fact that many of the relevant changes in the social division of labor have taken place outside of the context of the individual firm and even with the opposition of most capitalists. Intrinsic to the logic of capital accumulation is the relative incompatibility between the developmental requirements of capital in general and the self-perceived interests of individual capitalists. Just as the decisions of separate capitalists in seeking to increase their own

rate of profit culminate in contradictions for the accumulation process as a whole, so too the structural changes which might effectively displace those contradictions will frequently be experienced as contrary to the interests of each individual capitalist. This is particularly true with regard to the expansion of unproductive positions both within and outside of the capitalist firm. While such unproductive labor may satisfy certain essential functions with respect to the reproduction of capitalist social relations in general, as well as providing an indispensible means of surplus absorption, its expansion will nonetheless be apprehended as an immediate drain on capitalists' revenues and be opposed as such. The growth of the new middle class thus depends upon the emergence of social forces capable of transcending the parochial interests of individual capitalists and advancing the development of institutional reforms more compatible with the long-term stability of capital accumulation in general.

Historians of "corporate liberalism" identify one such force in the far-sighted efforts of a minority of the more class-conscious members of the capitalist class to rationalize the corporate system, eradicate potential sources of discontent, and enhance the legitimacy of the social order (Kolko 1967; Weinstein 1968). These efforts are manifested in philanthropic support for education, science and the arts, and in enlightened corporate advocacy of social welfare legislation and state regulation of industry — all of which have played a role in the expansion of new-middle-class positions in the unproductive sphere. Recent studies however suggest that there are definite limits to how far individual capitalists can be expected to depart from the immediate imperatives of private appropriation and profit maximization in order to develop a general interest in the rationalization of the social system. As Lehmann (1975) and Block (1977) have argued, much of what theorists of corporate liberalism have described as spontaneous efforts at rationalization on the part of corporate representatives are more accurately understood as attempts to co-opt movements for reform originating outside of the capitalist class and to channel these in the least threatening directions. The institutional reforms associated with the expansion of the new middle class should not therefore be attributed to corporate liberal initiatives alone, but require that we look to additional mechanisms of class transformation.

Most important in this regard are the dynamics of capitalist reform which are rooted in what contemporary theorists have described as the "relative autonomy" of the state (Poulantzas 1973). Analyses of this type point to the partial independence of the state apparatus from the direct control of the capitalist class an independence which enables the state to transcend the narrow interests of individual capitalists and groups of capitalists in order to more effectively serve the long-term needs of capital in general. Whereas individual capitalists are constrained to operate according to the logic of profit maximization, state managers occupy a structural position which is conducive to the development of a broader rationality. Their position depends upon the capacity to respond to two sets of partially contradictory needs. They must seek to preserve the legitimacy of the socio-political order in the face of demands from below. At the same time, they must be able to maintain an adequate level of economic activity, which in a capitalist society is equivalent to promoting conditions favorable to the private accumulation of capital (O'Connor 1973). In attempting to reconcile these two needs, state managers are forced to confront the inherent contradictions of the accumulation process and to respond with political and economic reforms capable of neutralizing or displacing their destabilizing effects. In the 20th century, such reforms have typically involved the expansion of the state's role in the regulation of the economy and in the provision of social services — policies which capitalists themselves, concerned with maintaining their autonomy and reducing their tax burden, are unlikely to have initiated themselves. Such reforms have nonetheless played an important role in stabilizing and rationalizing the capital accumulation process, and in doing so have contributed to a significant expansion of new-middle-class positions within the state sector.

Finally, it is important to recognize the extent to which changes in the class structure have been the direct result of efforts by members of the new middle class themselves, in the context of ongoing class struggle, to consolidate their economic position and enhance their social standing vis-à-vis both capitalists and workers (Ehrenreich and Ehrenreich 1977). These efforts have taken different forms and are manifested in a variety of levels of class struggle. Within the sphere of production, they have been reflected in the struggles of managers and engineers to further the rationalization of production relations, bringing them into conflict both with workers trying to defend their craft traditions and power, and with capitalists, often reluctant to see their authority of ownership constrained and depersonalized with the increasing bureaucratization of corporate structures (Haber 1964; Layton 1971; Nelson 1975). In the sphere of exchange, parallel struggles have occurred in the movement to professionalize various service and technical occupations as a means of enhancing their market power and preserving their status and autonomy from encroachments by either employers or clients (Sarfatti-Larson 1977). In the political sphere, new-middle-class reformers have mobilized behind "progressive" legislation for the expansion of public education, the proliferation of social welfare services, and the establishment of state regulatory and planning agencies - contributing to the rationalization of capitalist social relations and, at the same time, creating new institutionalized roles for themselves and other members of their class (Hofstadter 1955; Lasch 1965; Wiebe 1967). Finally, in the ideological sphere, new-middle-class representatives have contributed to the propagation of ideologies of individualism, classlessness and upward mobility, the belief in social amelioration through gradual reform, the meritocratic legitimation of inequality, the cult of expertise and other technocratic ideologies — all of which have influenced the course of class struggle as well as the process of class transformation.

The Contemporary Development of the New Middle Class

An analysis of the current stage in the development of the new middle class must include two things. Since the growth of the new middle class has been the product of the combined and uneven development of several historical forces, it is necessary to specify the present period according to which of these forces are ascendant, which are in decline, and how these uniquely define the current pattern and direction of new-middle-class expansion. Second, since changes in the social division of labor have been part of a general process of structural adaptation to the contradictions of capital accumulation, it is important to situate the growth of the new middle class in relation to the contemporary stage of the accumulation process with its new and emerging contradictions.

In order to address these issues it is necessary to have an empirical estimate of the historical expansion of the new middle class and each of its principal components. This is a task which can be accomplished only with considerable difficulty, both because of the inherent ambiguity of the boundaries of the new middle class and because of the nature of the data available for this purpose. The customary method of documenting changes in the American class structure is by reference to shifts in the distribution of the economically active population among the occupational categories employed by the Bureau of the Census. This approach leaves much to be desired. The categories used in the presentation of census data are not directly comparable to the criteria for class position employed in Marxian analysis (Wright, 1978). Census categories are based on the notion of occupations as designations within the functional or technical division of labor, rather than positions defined in terms of the social relations of production, and therefore include individuals from several class locations. The use of census data for the purpose of class analysis therefore requires an effort to translate occupational categories into categories of class position.

Two basic adjustments can be made which will help to distinguish new-middle-class positions from

those of other classes. First, we can separate selfemployed persons from each occupational category as a means of excluding bourgeois and petty-bourgeois positions from our calculations. Second, we can decompose aggregate occupational statistics into detailed job categories and recombine these in a manner which more closely approximates the division between the proletariat and the new middle class. Table 2 presents an estimate of the expansion of the new middle class which was derived from census data in this manner.⁹

Included in this table is a division of the new middle class between private and state sectors of employment and a breakdown of new-middle-class positions into four general categories, depending upon their major function with respect to the capital accumulation process.

- 1. The supervision and control of the labor process: managers, foremen, technical supervisors, etc.
- 2. The reproduction of capitalist social relations: teachers, social workers, health professionals, state administrators, lawyers, cultural workers, etc.
- 3. The accounting and realization of value: professionals in advertising, sales, accounting, banking, finance, insurance, etc.
- 4. The transformation of the technical means of production: scientists, engineers, research technicians, etc.

Although there is no strict one-to-one correspondence between these four functions and individual positions within the social division of labor, an approximate breakdown of this type will nonetheless help us to distinguish the different processes of new-middle-class expansion and to trace their historical development.

An examination of this table suggests some important conclusions about the latest stage of new-middleclass expansion. Although the new middle class in the United States has been expanding since the beginning of the 20th century, there are indications that we have entered into a period of diminishing growth and may even be approaching the upper limits to the size of the new middle class. Many of the structural transformations which contributed to the growth of this class during the early part of the century are effectively completed, while the expansionary trends which have supplemented these in the most recent period are beginning to reveal their own limits and contradictions. The elimination of the petty bourgeoisie and incorporation of traditionally independent occupations within capitalist relations of production, for example, has been largely exhausted as a basis for the further expansion of the new middle class. Accounting for approximately one-third of the labor force at the beginning of the century, the proportion of self-employed

TABLE 2: NEW-MIDDLE-CLASS POSITIONS WITHIN THE U.S. LABOR FORCE: 1900 TO 1978

	1900	1910	1920	1930	1940	1950	1960	1970	1978
Total (in thousands)	1,605	2,536	3,785	5,314	6,026	8,844	12,240	18,131	23,885
Percent of Labor Force	6.0	7.3	9.5	11.3	13.3	15.9	18.9	23.6	25.3
Sector (% of labor force)									
Private	3.7	5.0	6.8	8.0	9.6	11.6	14.1	16.7	18.3
State	2.3	2.3	2.7	3.0	3.7	4.3	4.9	6.9	7.1
Function (% of labor force)									
Supervision	1.6	2.3	3.1	3.3	4.1	5.6	6.3	6.8	7.9
Reproduction	3.2	3.5	3.9	4.7	5.2	6.0	6.2	8.4	9.6
Realization	0.9	1.2	2.0	2.5	3.3	3.8	4.1	5.0	5.2
Technological innovation	0.3	0.4	0.5	0.8	0.7	0.8	2.2	3.4	2.6

SOURCES: U.S. Department of Commerce, Bureau of the Census, 12th Census (1900), vol. 2; 13th Census (1910), vol. 4; 14th Census (1920), vol. 4; 15th Census (1930), vol. 5; 16th Census (1940), vol. 4; Comparative Occupational Statistics for the United States, 1870-1940; 17th Census (1950), vol. PE-1B; Occupational Trends in the United States, 1900-1950; 18th Census (1960), vol. PC(2)-7A; 19th Census (1970), vol. PC(2)-7A; U.S. Department of Labor, Employment and Training Report of the President (1979); Spurgeon Bell, Productivity, Wages and National Income (Washington, D.C.: 1940).

workers has been reduced to less than one in ten, leaving the United States with the smallest remaining percentages of independent producers among industrial capitalist nations (O.E.C.D. 1978). The same is true of the effects of the concentration and centralization of capital. The differentiation of the functions of capital which accompanied the increase in the scale of capitalist enterprise and contributed to the early expansion of the new middle class is also largely complete. With further increases in the scale of corporate enterprise, it is even possible that the proportion of capitalist functionaries may tend to decline as economies of scale begin to be reflected at the administrative level.10 The creation and expansion of new-middle-class positions through the dequalifications of direct producers is also a process with definite historical limits. Approximately two-thirds of the jobs in the American economy have already been reduced to such simple skills as can be learned in a few days to at most several months of on-the-job training (Braverman 1974:443). The growing dissatisfaction of American workers with conditions of deskilled labor, and the increased interest of corporations in job enlargement and limited forms of worker participation suggest that the traditional strategy of dequalification may have reached its limits as an effective mechanism of labor motivation and control.11

In each of these instances, historical trends which were prominent in the early growth of the new middle class have tended to exhaust their capacity for further development. In recent decades, these have been eclipsed by other historical forces as the primary bases of change in the class structure. Two processes in particular have been most responsible for the expansion of the new middle class in the period since World

War II. First is the accelerated transformation of productive forces, sometimes referred to as the "third technological revolution." Second is the expansion of the role of the capitalist state in reproducing the necessary conditions for the accumulation of capital. Together, these two forces contributed to the extraordinarily high rate of new-middle-class expansion between roughly 1950 and 1970.

Because it is rooted in the contradictory dynamics of the capital accumulation process, the development of technology under capitalism is an inherently uneven process. Periods of intensive mechanization exhaust their capacity to increase the rate of profit and are followed, in a cyclical fashion, by periods of relative technological stagnation (Mandel 1975). The concept of the "third technological revolution" has been used to describe the latest of such periods of intensive technological renewal under capitalism. Whereas the first technological revolution was based on the steam engine, and the second on the electric and internal combustion motor, the third has been based upon computers and other types of electronic machinery. The qualitative transformation of productive forces associated with the adoption of automatic control and dataprocessing systems has contributed greatly to the demand for highly qualified scientific and technical personnel. Throughout the 1950s and 1960s this operated as an important basis of new-middle-class expansion, compensating for the decline of earlier trends. Between 1950 and 1970, the number of new-middle-class positions in the scientific and technical fields increased from less than one percent to over three percent of the labor force. This accounted for approximately onethird of the proportional expansion of the new middle class during this period. By the late 1960s, however, the

initial research, design and installation phase of the third technological revolution began to draw to a close as new forms of technology became generalized throughout industry and their construction and installation became increasingly routinized. While further research and development has continued beyond this stage, the exaggerated demand for scientific and technical personnel associated with the first feverish burst of automation has tended to return to its preautomation levels (Lockhart 1970). With the consolidation of the third technological revolution, other forces have also operated to limit the growth of the new middle class. Newly established occupations — many of which originated as relatively skilled and privileged positions - have become subject to the general trend of proletarianization. Further, as automated processes are extended throughout industry, they eventually begin to displace some of the control functions traditionally performed by occupants of new-middle-class positions. This occurs not only among scientific and technical personnel, but among middle managers also, as computerized information-handling systems allow for a recentralization of decision-making power within top management (Seligman 1968:184).

The second major force behind the growth of the new middle class in the postwar period has been the progressive expansion of the economic role of the state and the corresponding increase of new-middle-class positions within the public sector. The present stage of capitalist development is distinguished by the increasing involvement of the state in the economic process. conditioned by the twin imperatives of containing class conflict and compensating for inherent tendencies towards economic crisis and stagnation. This trend is reflected in the expansion of unproductive state expenditures and in the increase in the number of state employees engaged broadly in the reproduction of capitalist social, political and cultural relations (teaching, state administration, social services, etc.). During the 1960s, the expansion of state employment in these areas accounted for approximately 40 percent of the overall growth of the new middle class. 12 By the early 1970s, however, this basis for the expansion of the new middle class had begun to manifest its own internal contradictions. Contradictions between the legitimation and accumulation functions of the state, between the general requirements of capital accumulation and the influence of particularistic interests in the formation of state policy, and between the increasing socialization of capital costs by the state and the continued private appropriation of capitalist revenues have resulted in a widening structural gap between the level of state expenditures and that of state revenues (O'Connor 1973). This has generated increasing fiscal crisis and the tendency toward permanent inflation both of which impose limits upon the further expansion of the state, and hence upon the future growth of the new middle class.

Present indications thus point to a leveling of the growth of the new middle class for the foreseeable future. This trend can already be seen in the occupational statistics for recent years. Between 1970 and 1978 the proportion of the new-middle-class positions within the labor force increased by an average of less than one-fourth of one percent per year - a rate less than half the average for the previous decade and lower than that of any decade since the 1930s. Of the developments which might reverse this trend, none appear likely at the present time. A new transformation of the technical forces of production comparable to that of the third technological revolution does not appear on the horizon. The postwar wave of technological renewal depended upon a unique combination of economic factors (Mandel 1975: 147-183), none of which are likely to be reproduced within the present period of global economic stagnation. Neither does the resolution of the fiscal crisis of the state through what O'Connor has called the creation of a "social-industrial complex" appear imminent. The continued expansion of unproductive state expenditures confronts economic as well as political barriers (Yaffe 1973: 216-228; O'Connor 1973: 221-226). The present pattern of fiscal crisis and budgetary cutbacks is thus likely to continue into the 1980s. In the longer run, the intensification of the international division of labor can be expected to contribute to the concentration of new-middle-class positions in metropolitan centers such as the United States (Hymer 1972). In the immediate future, however, the effects of such a trend are unlikely to compensate for the decline in other forces of new-middle-class expansion.

The political consequences of this curtailment of new-middle-class expansion are potentially significant. To the extent that class interests in the United States have been obscured by the fluid and changing nature of the class structure, the relative stabilization of class boundaries can be expected to result in an increase in the visibility and salience of class issues. From the standpoint of the working class, the historical expansion of the new middle class beyond its capacity to reproduce itself has provided opportunities for upward mobility to a substantial number of workingclass individuals. This access to new-middle-class positions has been a major force in shaping the class consciousness of the American working class, replacing the frontier and earlier opportunities for pettybourgeois independence as the objective basis for an ideological orientation of individual achievement. The effect of this achievement ideology has been to channel working-class discontents into the competitive pursuit of individual mobility and away from collective struggle for the advancement of class interests. With the curtailment of new-middle-class expansion, such opportunities for upward mobility are certain to decline. Although the tenaciousness of the existing ideology should not be underestimated, the relative stabilization of class boundaries increases the likelihood of a more coherent working-class identity and political consciousness.

From the standpoint of the new middle class, an increased awareness of class interests and class identity is also likely. As a confident and ascending social class during the uninterrupted economic expansion of the postwar period, the new middle class occupied a position conducive to a political ideology of "classlessness" in which it identified its interests with those of society in general. With the curtailment of newmiddle-class expansion and the intensification of class antagonisms during the present period of economic decline, we can expect the emergence of a more distinctive and class-specific political orientation as members of this class struggle to preserve their position and privilege. The intergenerational reproduction of class position, in particular, is certain to become more problematic as the size of the new middle class begins to level off. The high rates of unemployment and underemployment among recent college graduates (O'Toole 1975) is an indication of this trend, and not merely a cyclical phenomenon.

The intensification of class struggle around this issue may take different forms. On the one hand, we can expect increased middle-class opposition to the mobility aspirations of minority and working-class youth. The political and ideological manifestations of such opposition are already visible in the recent attacks on affirmative action and open admissions, the resurgence of racial and genetic interpretations of intelligence, the movement toward a streamlining of educational stratification and the redoubling of efforts at professionalization as a means of controlling entry into new-middle-class occupations. This same situation, on the other hand, also increases the possibility of more radical middle-class opposition to the ruling interests of the capitalist class. Recent theorists, for example, have cited the threat of proletarianization as one of the underlying causes of student radicalism and

the growing underemployment among collegeeducated workers as a potential basis for increased demands for workers' control (Miles 1974; Bowles 1974)

The coexistence of these contradictory trends merely points up a general characteristic of the politics of the new middle class. Suspended between the proletariat and the bourgeoisie, with objective interests which separate it from both of these other classes, the new middle class is capable of widely divergent and often contradictory political orientations - particularly in times of crisis. This raises what is perhaps the most important question for class analysis: the question of class alliances. The ultimate consequence of the rise of the new middle class is that the analysis of social and political change can no longer be framed in terms of the tendency toward class polarization, but must address the question of the nature and development of alliances between classes.13 The intermediate position of the new middle class - sharing characteristics with both the bourgeoisie and the proletariat — makes it the pivotal class in the formation of such alliances. While the immediate prospects for a progressive alliance between the new middle class and the working class are problematic, to say the least, the experience of advanced capitalist societies suggests that movements for social change which do not have a measure of support in both of these classes are virtually certain of defeat. This is equally true of working-class movements which alienate the political support of the new middle class, as of forms of new-middle-class radicalism which fail to address themselves to the interests of the workingclass majority. The question of class alliances, and the consequences of different forms of alliance, thus pose some of the most crucial issues of Marxian class analysis.

> Val Burris Dept. of Sociology University of Oregon Eugene, Oregon 97403

NOTES

- 1. See especially Poulantzas (1974), Carchedi (1975), Wright (1976) and the Ehrenreichs (1977). Two excellent collections of essays on this topic have recently been compiled by Hunt (1977) and Walker (1979).
- 2. A similar viewpoint is dominant among neo-Marxist theorists of the "new working class." The theories of Mallet (1975), Touraine (1971) and the early writings of Gorz (1967) are all based on the notion of autonomous technological development as the origin of change in the class structure. This technogenic perspective is criticized in the later writings of Gorz (1972).
- 3. These three contradictions, it should be noted, do not operate with equal force at all times, but exist in the form of structural tendencies which impact differentially upon the economic process at different stages of capital accumulation. For example, Wright (1975), in his analysis of the historical development of capitalism, sees a long-term
- secular trend from the first to the third to the second of these as the dominant contradiction of the accumulation process. From a different perspective, Mandel (1978) notes a movement from the first to the second of these contradictions in the course of the upturn of the business cycle, with the third contradiction being predominant during the cyclical downturn.
- 4. Marx (1976:1019-1038) describes this process as the transition from the "formal subsumption of labor under capital" to the "real subsumption of labor under capital." The first of these (the wage-labor relation) is a general characteristic of every capitalist process of production and provides the necessary basis for the latter. At the same time, the formal subsumption of labor under capital can also be found as "a particular form alongside the specifically capitalist mode of production in its developed form." According to Marx, the relation between capitalist and wage-laborer acquires "a specifically capitalist

form" only with the transformation and socialization of the immediate process of production under the domination of capital, or what Marx calls the "real subsumption of labor under capital."

- 5. This trend can be documented in a number of areas. In retail trade, for example, the number of independent proprietors in the U.S. declined by about 800,000 between 1940 and 1970 (from 3.0% to 0.7% of the labor force), while the number of salaried managers in retail establishments increased by about 742,000 (from 0.7% to 1.4% of the labor force). Similar trends can be found among other categories of managerial employees. In the cultural field, the increasing penetration of capitalist social relations has contributed to a decline in the number of self-employed writers, artists and entertainers, while the ranks of salaried professionals in these areas have increased. Between 1940 and 1970 the former declined from 0.2% to 0.1% of the labor force, while the latter increased from 0.4% to 0.5%. The same pattern exists in traditional professions such as law. Lawyers in private practice made up about 0.3% of the labor force in 1940, but only 0.2% in 1970. During the same period, the percentage of salaried lawyers increased from 0.1% to 0.2% of the labor force (U.S. Department of Commerce, Bureau of Census, 16th Census (1940), vol. 4, pp. 119-121; 19th Census (1970), vol. PC (2)-7A, pp. 696-714).
- 6. The introduction of electronic computers into the workplace provides an excellent example of this trend. When computers were first introduced, not only those engaged in research and development, but the actual operators of electronic hardware tended to be highly skilled engineers. In the brief period of several decades, however, the latter positions have been largely reduced to routine functions requiring, at most, one or two years of technical training beyond high school (Greenbaum 1976).
- 7. Although most analyses of class treat the structure of class relations as causally and analytically prior to the patterning of class conflict, it is important to recognize the degree to which class structures are themselves conditioned by the course of class struggle. Such features of class structure as the internal differentiation of classes, the location of class boundaries, and the size and form of intermediate classes are all (within limits) subject to variation as a consequence of particular forms of class conflict. This reflects what may be described

as the dialectical relationship between class structure and class conflict.

- 8. Even if this were not a problem, the use of the unproductive/productive distinction as a sufficient criteria for new-middle-class status would still be problematic, since, by itself, it implies only the most superficial differences in the material conditions and corresponding interests of different social positions (Carchedi 1975; Wright 1976).
- 9. The method employed here can be described roughly as follows. After excluding all self-employed workers, the following were included as predominantly new-middle-class occupations: (a) all professional, technical and kindred workers except lower-level technicians; (b) all managers and administrators; (c) all farm managers and foremen; (d) among sales workers, such occupations as advertising, insurance and real estate agents, stock and bond salesmen, and sales representatives in manufacturing industries and wholesale trade; (e) among clerical and kindred workers, such occupations as clerical supervisors, estimators and investigators, real estate appraisers, insurance adjusters and investigators; (f) among craftsmen and kindred workers, all foremen.
- 10. Studies of industrial bureaucracy have found that, beyond an initial expansionary stage, the ratio of administrative to productive personnel tends to decline with further increases in the size of the productive unit (Bendix 1956; Klatzky 1970).
- 11. One of the unanticipated consequences of recent experiments in job enlargement and worker participation has been a significant reduction in the need for supervisory personnel (U.S. Senate 1972:134).
- 12. If we consider the number of positions which, while not directly employees of the state, are nonetheless dependent upon the state budget (engineers in defense industries, faculty in private colleges, etc.), it is likely that close to half of the growth of the new middle class during the recent period can be attributed to this expansion of the state sector.
- 13. On the question of class alliances and the important theoretical issues which this poses of Marxist class analysis, see especially the recent writings of Poulantzas (1974, 1975) and Laclau (1977).

REFERENCES

Aronowitz, Stanley. False Promises. New York: McGraw Hill, 1973.

Baran, Paul and Paul Sweezy. Monopoly Capital. New York: Monthly Review, 1966.

Becker, James. "Class Structure and Conflict in the Managerial Phase." Science and Society 37:3 (Fall 1973).

Bell, Spurgeon. Productivity, Wages, and National Income. Washington, D.C.: Brookings, 1940.

Bendix, Reinhard. Work and Authority in Industry. Berkeley: University of California, 1956.

Berg, Ivar. Education and Jobs. New York: Praeger, 1971.

Block, Fred. "Beyond Corporate Liberalism." Social Problems 24:3 (February 1977).

Bowles, Samuel. "The Integration of Higher Education into the Wage Labor System." Review of Radical Political Economics 6:1 (Spring 1974).

Braverman, Harry. Labor and Monopoly Capital. New York: Monthly Review, 1974.

Bright, James. "The Relationship of Increasing Automation and Skill Requirements." *Technology and the American Economy* 2. Washington, D.C.: National Commission on Technology, Automation and Economic Progress, 1966.

Carchedi, G. "On the Economic Identification of the New Middle Class." *Economy and Society* 4:4 (1975).

Dahrendorf, Ralf. Class and Class Conflict in Industrial Society. Stanford: Stanford University Press, 1959.

DeVroey, Michel. "The Separation of Ownership and Control in Large Corporations." *Review of Radical Political Economics* 7:2 (Summer 1975).

Ehrenreich, Barbara and John Ehrenreich. "The Professional-Managerial Class." *Radical America* 11:2/3 (March-April/May-June 1977).

Freedman, Francesca. "The Internal Structure of the Proletariat: a Marxist Analysis." *Socialist Revolution* 26 (October-December 1975).

Fuchs, Victor. *The Service Economy*. New York: Columbia University Press, 1968.

Galbraith, John Kenneth. The New Industrial State. New York: New American Library, 1967.

Giddens, Anthony. The Class Structure of the Advanced Societies. New York: Harper and Row, 1973.

Gorz, Andre. Strategy for Labor. Boston: Beacon, 1967.

"Technical Intelligence and the Capitalist Division of Labor. *Telos* 12 (Summer 1972).

Greenbaum, Joan. "The Division of Labor in the Computer Field." Monthly Review 28:3 (July-August 1976).

Haber, Samuel. Efficiency and Uplift. Chicago: University of Chicago Press, 1964.

Hofstadter, Richard. The Age of Reform. New York: Knopf. 1955.

Hunt, Alan, ed. Class and Class Structure. London: Lawrence and Wishart, 1977.

Hymer, Stephen. "The Multinational Corporation and the Law of Uneven Development." In Jagdish N. Bhagwati, ed., *Economics and the World Order: From the 1970s to the 1990s.* New York: Free Press, 1972.

Kerr, Clark, John Dunlop and Frederick Harbison. Industrialism and Industrial Man. Cambridge: Harvard University Press, 1960.

Klatzky, S.R. "Relationship of Organizational Size to Complexity and Coordination." *Administrative Science Quarterly* 15:4 (December 1970).

Kolko, Gabriel. The Triumph of Conservatism. New York: Free Press, 1963.

Laclau, Ernesto. Politics and Ideology in Marxist Theory. London: New Left Books, 1977.

Lasch, Christopher. The New Radicalism in America (1889-1963). New York: Knopf, 1965.

Layton, Edwin T. The Revolt of the Engineers. Cleveland: Case Western Reserve University Press, 1971.

Lehman, Ingrid. "Corporate Capitalism and the Liberal State." Kapitalistate 3 (Spring 1975).

Lockhart, Alexander. "The Effect of Recent Techno-economic Changes on the Mobility Patterns and Opportunities of the American Middle Class." Unpublished M.A. thesis, Simon Fraser University, Burnaby, B.C., Canada, 1970.

Mallet, Serge. Essays on the New Working Class. St. Louis: Teolos 1975.

Mandel, Ernest. Late Capitalism. London: New Left Books, 1975.

Marglin, Stephen. "What Do Bosses Do? The Origins and Functions of Hierarchy in Capitalist Production." *Review of Radical Political Economics* 6:2 (Summer 1974).

Marx, Karl. Grundrisse. Harmondsworth, England: Penguin, 1973.

Marx, Karl and Frederick Engels. Robert Tucker, ed., The Marx-Engels Reader. New York: Norton, 1972.

Miles, Michael W. "Student Alienation in the U.S. Higher Education Industry." *Politics and Society* 4:3 (Spring 1974).

Mills, C. Wright. White Collar. New York: Oxford, 1951.

Nelson, Daniel. Managers and Workers. Madison: University of Wisconsin Press, 1975

Nicolaus, Martin. "Proletariat and Middle Class in Marx." In James Weinstein and David W. Eakins, eds., For a New America. New York: Random House, 1970.

Noble, David F. America by Design. New York: Knopf, 1977.

O'Connor, James. The Fiscal Crisis of the State. New York: St. Martin's, 1973.

Ollman, Bertell. "Towards Class Consciousness Next Time: Marx and the Working Class." Politics and Society 3:1 (Fall 1972).

Organisation for Economic Co-operation and Development. Labour Force Statistics: 1965-1976. Paris: O.E.C.D., 1978.

O'Toole, James. "The Reserve Army of the Underemployed." Change 7:4/5 (May/June 1975).

Poulantzas, Nicos. *Political Power and Social Classes*. London: New Left Books, 1974.

_____. Fascism and Dictatorship. London: New Left Books, 1974.

_____. Classes in Contemporary Capitalism. London: New Left Books, 1975.

Przeworski, Adam. "Proletariat into a Class: the Process of Class Formation from Karl Kautsky's *The Class Struggle* to Recent Controversies." *Politics and Society* 7:4 (Summer 1977).

Sarfatti-Larson, Magali. The Rise of Professionalism. Berkeley: University of California Press, 1977.

Seligman, Ben. Economics of Dissent. Chicago: Quadrangle, 1968.

Stone, Katherine. "The Origins of Job Structures in the Steel Industry." Review of Radical Political Economics 6:2 (Summer 1974).

Szymanski, Albert. "Trends in the American Class Structure." Socialist Revolution 10 (July-August 1972).

Touraine, Alain. The Post-Industrial Society. New York: Random House, 1971.

U.S. Senate. Worker Alienation, 1972. Washington, D.C.: U.S. Government Printing Office, 1972.

Wachtel, Howard M. "Class Consciousness and Stratification in the Labor Process." *Review of Radical Political Economics* 6:1 (Spring 1974).

Walker, Pat, ed. Between Labor and Capital. Boston: South End Press, 1979.

Weinstein, James. The Corporate Ideal in the Liberal State, 1900-1918. Boston: Beacon, 1968.

Wiebe, Robert. The Search for Order, 1877-1920. New York: Hill and Wang. 1967.

Wright, Erik Olin. "Alternative Perspectives in the Marxist Theory of Capital Accumulation and Crisis." *Insurgent Sociologist* 6:1 (Fall 1975).

"Class Structure and Occupation." Paper presented at the American Sociological Association meetings, 1978.

Yaffe, David. "The Marxian Theory of Crisis, Capital and the State." Economy and Society 2:2 (May 1973).